

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
RUDOLF O. SIEGESMUND
4627 NORTH CENTRAL EXPRESSWAY
SUITE 2000
DALLAS, TX 75205-4022

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Date of mailing (day/month/year)	17 JUN 2005
-------------------------------------	-------------

Applicant's or agent's file reference
AUS920040026

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US05/12308

International filing date
(day/month/year) 12 April 2005 (12.04.2005)

Applicant
ELLIS BISHOP ET AL.

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 338.82.70.

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders

Shortly after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/ US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (571) 273-3201

Authorized officer *Rupal Dharia*
Rupal Dharia
Telephone No. 555-555-5555

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
RUDOLF O. SIEGESMUND
4627 NORTH CENTRAL EXPRESSWAY
SUITE 2000
DALLAS, TX 75205-4022

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Date of mailing
(day/month/year) **17 JUN 2008**

Applicant's or agent's file reference
AUS920040026

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US05/12308

International filing date
(day/month/year) 12 April 2005 (12.04.2005)

Applicant
ELLIS BISHOP ET AL.

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 338.82.70.

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders

Shortly after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/ US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (571) 273-3201

Authorized officer *Jana Vin*
Rupal Dharja
Telephone No. 555-555-5555

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference AUS920040026	FOR FURTHER ACTION <div style="display: flex; justify-content: space-between; font-size: small;"> see Form PCT/ISA/220 as well as, where applicable, item 5 below. </div>	
International application No. PCT/US05/12308	International filing date (<i>day/month/year</i>) 12 April 2005 (12.04.2005)	(Earliest) Priority Date (<i>day/month/year</i>) 15 April 2004 (15.04.2004)
Applicant ELLIS BISHOP ET AL.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of ³ sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

a. With regard to the **language**, the international search was carried out on the basis of:

- ☒ the international application in the language in which it was filed.
☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☐ **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,

- ☒ the text is approved as submitted by the applicant.
☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- ☐ the text is approved as submitted by the applicant.
☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

- ☐ as suggested by the applicant.
☒ as selected by this Authority, because the applicant failed to suggest a figure.
☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/12308

Box IV TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

A system and method is disclosed for managing information technology resources to provide processing capacity (103) to multiple customers (101) with varying requirements (224) in a shared computing environment. The inventive process comprises producing and maintaining a capacity plan that allocates capacity resources (103), handling requests for additional capacity resources (212), and analyzing requests for additional capacity resources to identify issues that should be resolved in future allocations (212).

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/12308

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G06F 15/173(2006.01)

USPC: 709/226

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 709/226, 709/220

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

USPAT, USPGPUB, EPO, JPO, DERWENT, and IBMTDB

search terms: capacity, plan, planning, thrend, simulate, threshold, service, and report

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,209,033 (DATTA et al.) 13 May 1997 (13.5.1997), column 2, line 54 - column 13, line 15	1, 3-36
---		2
Y		2
Y	US 6,738,736 (BOND) 6 October 2000 (6.10.2000), column 5, lines 35-55	2

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

16 May 2008 (16.05.2008)

Date of mailing of the international search report

17 JUN 2008

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

Rupal Dharia

Telephone No. 555-555-5555

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
RUDOLF O. SIEGESMUND
4627 NORTH CENTRAL EXPRESSWAY
SUITE 2000
DALLAS, TX 75205-4022

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference AUS920040026		Date of mailing (day/month/year) 17 JUN 2008
International application No. PCT/US05/12308		International filing date (day/month/year) 12 April 2005 (12.04.2005)
International Patent Classification (IPC) or both national classification and IPC IPC: G06F 15/173(2006.01) USPC: 709/226		Priority date (day/month/year) 15 April 2004 (15.04.2004)
Applicant ELLIS BISHOP ET AL.		

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Date of completion of this opinion 23 May 2008	Authorized officer Rupal Dharia Telephone No. 555-555-5555
--	---	--

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US05/12308

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
- ☐ table(s) related to the sequence listing

b. format of material

- ☐ on paper
- ☐ in electronic form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
- ☐ filed together with the international application in electronic form.
- ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US05/12308

Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>2</u>	YES
	Claims <u>1 and 3-36</u>	NO
Inventive step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-36</u>	NO
Industrial applicability (IA)	Claims <u>1-36</u>	YES
	Claims <u>NONE</u>	NO

2. Citations and explanations:

Please See Continuation Sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US05/12308

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

1. Claims 1-36 lack novelty under PCT Article 33(2) as being anticipated by Datta et al. (6,209,033).
2. Regarding claim 1, Datta disclosed producing and maintaining a capacity plan (abstract, column 2, lines 54-67, and Fig. 6); handling capacity requests from a requester (column 2, lines 54-67, column 6, line 65 - column 7, line 34, and Fig. 6); performing analysis review on capacity requests to identify capacity issues (column 4, line 44 - column 5, line 55); and executing a problem manager program in a data-processing system to resolve any identified capacity issues so that a service provider can meet all service obligations (column 4, line 44 - column 5, line 55).
3. Regarding claim 3, Datta disclosed determining capacity data requirements (abstract, column 2, lines 54-67, and Fig. 6); determining suppliers of the capacity data (abstract, column 2, lines 54-67, and Fig. 6); determining if the capacity data is already available (abstract, column 2, lines 54-67, and Fig. 6); acquiring the capacity data from the database (column 2, lines 54-67, and Fig. 6); validating the capacity data (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); determining if there is a regular need for the data (column 10, line 37 - column 11, line 15); and updating and documenting the database (column 10, line 37 - column 11, line 15).
4. Regarding claim 4, Datta disclosed responsive to determining that the capacity data is not already available (column 6, line 65 - column 7, line 10 and column 8, lines 42-50), contacting the capacity data owner (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); requesting the capacity data (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); and justifying the request for the capacity data to the capacity data owner (column 6, line 65 - column 7, line 10 and column 8, lines 42-50).
5. Regarding claim 5, Datta disclosed before gaining approval for the capacity plan, designing a configuration to support the capacity plan (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); and testing the designed configuration to determine if the configuration is capable of balancing a workload as required to meet existing and anticipated capacity obligations (column 6, lines 20-35).
6. Regarding claim 6, Datta disclosed before gaining approval for the capacity plan (abstract, column 2, lines 54-67, and Fig. 6), analyzing the performance impact of the capacity plan by determining the impact to the components of the capacity plan during the plan period (column 8, line 50 - column 9, line 16).
7. Regarding claim 7, Datta disclosed analyzing the capacity request with a problem management program (abstract, column 2, lines 54-67, and Fig. 6); extracting the requester's entitlements and standard data from a database (column 5, lines 20-55); determining if the requester is entitled to have the capacity request satisfied (column 5, lines 20-55); responsive to determining that the requester is entitled to have the capacity request satisfied (column 5, lines 20-55), determining if any non-standard data is required to satisfy the capacity request (column 7, lines 10-46); responsive to determining that non-standard data is required to satisfy the capacity request (column 7, lines 10-46), submitting a request for the non-standard data to a collection team (column 8, line 50 - column 9, line 16, and Fig. 9).

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US05/12308

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

receiving the data from the collection team (column 7, lines 10-46), and reviewing the non-standard data received from the collection team (column 7, lines 10-46); analyzing the capacity plan against actual usage data (column 8, line 50 - column 9, line 16, and Fig. 9); and updating the capacity plan to reflect the result of the capacity request (column 6, line 65 - column 7, line 10 and column 8, lines 42-50).

8. Regarding claim 8, Datta disclosed obtaining plan data from the database (abstract, column 2, lines 54-67, and Fig. 6); obtaining actual usage data from the database (abstract, column 2, lines 54-67, and Fig. 6); comparing the plan data with actual usage data (column 10, line 37 - column 11, line 15); determining from the comparison if the actual usage data deviates from the plan data (column 10, line 37 - column 11, line 15); and responsive to determining that the actual usage data deviates from the plan data (column 10, line 37 - column 11, line 15), investigating the deviations (column 10, line 37 - column 11, line 15).

9. Regarding claims 9 and 18, Datta disclosed determining if the deviation is the result of an anomaly (column 10, line 37 - column 11, line 15); and responsive to determining that the deviation is a result of an anomaly (column 10, line 37 - column 11, line 15), documenting the deviation (column 10, line 37 - column 11, line 15).

10. Regarding claims 10 and 19, Datta disclosed determining if the deviation is the result of a business cycle (column 2, lines 24-51 and column 5, lines 20-55); responsive to determining that the deviation is the result of a business cycle (column 2, lines 24-51 and column 5, lines 20-55), documenting the deviation (column 10, line 37 - column 11, line 15).

11. Regarding claims 11 and 20, Datta disclosed determining if the deviation is the result of bad data capture (column 2, lines 24-51 and column 5, lines 20-55); and responsive to determining that the deviation is the result of a bad data capture (column 2, lines 24-51 and column 5, lines 20-55), documenting the bad data capture details with a problem management program and documenting the deviation with a problem management program (column 10, line 37 - column 11, line 15).

12. Regarding claims 12 and 21, Datta disclosed determining if the deviation is the result of an unknown reason (column 5, line 43 - column 6, line 15); and responsive to determining that the deviation is the result of an unknown reason (column 10, line 37 - column 11, line 15), documenting the deviation with a problem management program (column 10, line 37 - column 11, line 15), determining if the deviation is likely to re-occur (column 5, line 43 - column 6, line 15), and responsive to determining that the deviation is likely to re-occur (column 5, line 43 - column 6, line 15), documenting the required capacity plan changes (column 5, line 43 - column 6, line 15).

13. Regarding claim 13, Datta disclosed analyzing the capacity request with a problem management program (abstract, column 2, lines 54-67, and Fig. 6); extracting the requester's entitlements and standard data from a database (abstract, column 2, lines 54-67, and Fig. 6); determining if the requester is entitled to have the capacity request satisfied (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); responsive to determining that the requester is entitled to have the capacity request satisfied (column 5, lines 20-55), determining if any non-standard data is required to satisfy the capacity request (column 7, lines 10-46); responsive to determining that non-standard data is required to satisfy the capacity request (column 7, lines 10-46), submitting a request for the non-standard data to a collection team (column 6, line 65 - column 7, line 10 and column 8, lines 42-50), receiving the non-standard data from the collection team (column 7, lines 10-46), and reviewing the non-standard data received from the collection team (column 7, lines 10-46); managing capacity data for reporting (column 7, lines 10-46); determining if new or changed reports are required (column 7, lines 10-46); responsive to determining that new or changed reports are required, running reports; and updating the capacity plan to reflect the result of the capacity request (column 6, line 65 - column 7, line 10 and column 8, lines 42-50).

14. Regarding claim 14, Datta disclosed determining the data required for generating reports (column 2, lines 24-51 and column 5, lines 20-55); determining if additional data elements are needed for generating reports (column 2, lines 24-51 and column 5, lines 20-55); responsive to determining that additional data elements are needed for generating reports (column 6, line 65 - column 7, line 10 and column 8, lines 42-50), requesting the additional data elements from a data collection team (column 6, line 65 - column 7, line 10 and column 8, lines 42-50), and responsive to receiving the additional data elements from the data collection team (column 6, line 65 - column 7, line 10 and column 8, lines 42-50), validating the additional data elements (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); determining the report format (column 5, line 43 - column 6, line 15 and Fig. 2); determining the frequency and date of reporting (column 5, line 43 - column 6, line 15 and Fig. 2); determining the destination for the report (column 5, line 43 - column 6, line 15); and notifying a report recipient when the report is available for retrieval from a database (column 5, line 43 - column 6, line 15 and Fig. 2).

15. Regarding claim 15, Datta disclosed extracting report specifications from the database (column 5, line 43 - column 6, line 15); creating pre-defined reports with a reporting program (column 5, line 43 - column 6, line 15); determining if the report format or report content requires correction (column 5, line 43 - column 6, line 15); responsive to determining that the report requires correction, making the required changes to the report (column 5, line 43 - column 6, line 15); and distributing reports to one or more report recipients (column 5, line 43 - column 6, line 15 and Fig. 2).

16. Regarding claim 16, Datta disclosed analyzing the capacity request with a problem management program; extracting the requester's entitlements and standard data from a database; determining if the requester is entitled to have the capacity request satisfied (column 5, lines 20-55); responsive to determining that the requester is entitled to have the capacity request satisfied (column 5, lines 20-55), determining if any data is required to satisfy the capacity request (column 7, lines 10-46); responsive to determining that non-standard data is required to satisfy the capacity request (column 7, lines 10-46), submitting a request for the non-standard data to a collection team (column 10, line 37 - column 11, line 15), receiving the non-standard data from the collection team (column 10, line 37 - column 11, line 15), and reviewing the non-standard data received from the collection team; analyzing trends (column 2, lines 24-51 and column 5, lines 20-55); and updating the capacity plan to reflect the result of the capacity request (column 6, line 65 - column 7, line 10 and column 8, lines 42-50).

17. Regarding claim 17, Datta disclosed identifying relevant trends (column 2, lines 24-51 and column 5, lines 20-55); obtaining historical capacity data from the database (column 2, lines 24-51 and column 5, lines 20-55); determining if a specific analysis is required (column 2, lines 24-51 and column 5, lines 20-55); responsive to determining that a specific analysis is required (column 6, line 65 - column 7, line 10 and column 8, lines 42-50), determining if additional capacity data is available (column 6, line 65 - column 7, line 10 and column 8, lines 42-50).

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US05/12308

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

10 and column 8, lines 42-50), responsive to determining that additional capacity data is not available (column 6, line 65 - column 7, line 10 and column 8, lines 42-50), requesting the additional capacity data to a collection team (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); obtaining the additional capacity data (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); selecting resource types and workload types to identify trends (column 2, lines 24-51 and column 5, lines 20-55); responsive to identifying trends (column 2, lines 24-51 and column 5, lines 20-55), documenting the trends in the database (column 2, lines 24-51 and column 5, lines 20-55); determining if any identified trends deviate from the capacity plan (column 10, line 37 - column 11, line 15); and responsive to determining that one or more identified trends deviates from the capacity plan (column 2, lines 24-51 and column 5, lines 20-55), investigating the deviations (column 2, lines 24-51 and column 5, lines 20-55).

18. Regarding claim 22, Datta disclosed analyzing the capacity request with a problem management program (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); extracting the requester's entitlements and standard data from a database (column 5, lines 20-55); determining if the requester is entitled to have the capacity request satisfied (column 5, lines 20-55); responsive to determining that the requester is entitled to have the capacity request satisfied (column 5, lines 20-55), determining if any non-standard data is required to satisfy the capacity request (column 7, lines 10-46); responsive to determining that non-standard data is required to satisfy the capacity request (column 7, lines 10-46), submitting a request for the non-standard data to a collection team (column 7, lines 10-46), receiving the non-standard data from the collection team (column 7, lines 10-46), and reviewing the non standard data received from the collection team (column 7, lines 10-46); analyzing commitments and thresholds (column 10, line 37 - column 11, line 15); determining if threshold changes are required (column 10, line 37 - column 11, line 15); responsive to determining that threshold changes are required (column 10, line 37 - column 11, line 15), using a problem manager program to determine the new threshold value (column 10, line 37 - column 11, line 15); and updating the capacity plan to reflect the result of the capacity request (column 6, line 65 - column 7, line 10 and column 8, lines 42-50).

19. Regarding claim 23, Datta disclosed obtaining operational trend data from the database (column 2, lines 24-51 and column 5, lines 20-55); obtaining capacity and performance objectives from the database (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); obtaining service level attainment and customer satisfaction data from the database (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); determining if any service commitments have been missed (column 5, line 43 - column 6, line 15); responsive to determining that one or more service commitments have been missed, determining resource usage at the time of the missed service commitment (column 5, line 43 - column 6, line 15); reviewing thresholds against current service commitments (column 10, line 37 - column 11, line 15); determining if threshold changes are required (column 10, line 37 - column 11, line 15); responsive to determining if threshold changes are required (column 10, line 37 - column 11, line 15), documenting the required threshold changes (column 10, line 37 - column 11, line 15); determining if capacity plan changes are required (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); and responsive to determining that capacity plan changes are required, updating the capacity plan to reflect the required changes (column 6, line 65 - column 7, line 10 and column 8, lines 42-50).

20. Regarding claim 24, Datta disclosed analyzing the capacity request with a problem management program (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); extracting the requester's entitlements and standard data from a database (column 5, lines 20-55); determining if the requester is entitled to have the capacity request satisfied (column 5, lines 20-55); responsive to determining that the requester is entitled to have the capacity request satisfied (column 5, lines 20-55), determining if any non-standard data is required to satisfy the request (column 7, lines 10-46); responsive to determining that non-standard data is required to satisfy the capacity request (column 7, lines 10-46), submitting a request for the non-standard data to a collection team (column 7, lines 10-46), receiving the non-standard data from the collection team (column 7, lines 10-46), and reviewing the non-standard data received from the collection team (column 7, lines 10-46); forecasting resource requirements (column 6, lines 20-35); and updating the capacity plan to reflect the result of the capacity request (column 6, line 65 - column 7, line 10 and column 8, lines 42-50).

21. Regarding claim 25, Datta disclosed gathering resource and workload requirements (column 8, line 50 - column 9, line 16, and Fig. 9); obtaining load requirements from the database (column 8, line 50 - column 9, line 16, and Fig. 7); obtaining historical trends from the database (column 2, lines 24-51 and column 5, lines 20-55); characterizing and sizing workload requirements (column 8, line 50 - column 9, line 16); determining and applying a projection methodology (column 6, line 65 - column 7, line 10 and column 8, lines 42-50); forecasting and sizing periods for the workload requirements (column 6, lines 20-35); translating the workload requirements to technical resource needs (column 8, line 50 - column 9, line 16); and updating the capacity plan to reflect the technical resource needs (column 6, line 65 - column 7, line 10 and column 8, lines 42-50).

22. Regarding claim 26, Datta disclosed identifying a unit of workload (column 8, line 50 - column 9, line 16, and Fig. 9); determining a period of interest (column 8, line 50 - column 9, line 16, and Fig. 2); determining a magnitude of usage (column 8, line 50 - column 9, line 16, and Fig. 9); determining a duration of usage (column 8, line 50 - column 9, line 16, and Fig. 9); extracting resource usage data from the database for the period of interest (column 8, line 50 - column 9, line 16, and Fig. 9); determining the resource used per unit of workload (column 8, line 50 - column 9, line 16, and Fig. 9); correlating the unit of workload with the resource usage data applying assumptions (column 8, line 50 - column 9, line 16, and Fig. 9); applying and normalizing factors (column 8, line 50 - column 9, line 16, and Fig. 9); and validating results with peer reviews (column 8, line 50 - column 9, line 16, and Fig. 9).

23. Regarding claim 27, Datta disclosed wherein determining and applying a projection methodology comprises the steps of: reviewing available workload data (column 8, line 50 - column 9, line 16, and Fig. 9); evaluating appropriateness and source of workload data (column 8, line 50 - column 9, line 16); choosing the most appropriate projection methodology (column 6, lines 20-35); applying the chosen projection methodology; producing forecast projections and assumptions (column 6, lines 20-35); and storing the forecast projections and assumptions in the database (column 6, lines 20-35).

24. Regarding claim 28, Datta disclosed analyzing the capacity request with a problem management program (column 4, line 44 - column 5, line 55); extracting the requester's entitlements and standard data from a database (column 5, lines 20-55); determining if the requester is entitled to have the capacity request satisfied (column 5, lines 20-55); responsive to determining that the requester is not entitled to have the capacity request satisfied (column 5, lines 20-55), documenting the entitlement failure details (column 5, lines 20-

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under Article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the *PCT Applicant's Guide*, a publication of WIPO.

In these Notes, "Article," "Rule" and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report and the written opinion of the International Searching Authority, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only (see *PCT Applicant's Guide*, Volume I/A, Annexes B1 and B2).

The attention of the applicant is drawn to the fact that amendments to the claims under Article 19 are not allowed where the International Searching Authority has declared, under Article 17(2), that no international search report would be established (see *PCT Applicant's Guide*, Volume I/A, paragraph 296).

What parts of the international application may be amended ?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Preliminary Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When ? Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments ?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How ? Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments ?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international